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CRASSULA AQUATICA (CRASSULACEAE) REDISCOVERED IN ALABAMA

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ABSTRACT

The rediscovery of *Crassula aquatica* in Alabama is documented. It was collected by Charles Mohr in Mobile County in 1887 but not subsequently observed until recollected by the author in Marengo County in 2012 in a mudflat of a backwater lake of the Tombigbee River.

KEY WORDS: Alabama, *Crassula aquatica*, Crassulacaceae, *Crassula saginoides*

Crassula aquatica (L.) Schönland is a diminutive aquatic annual. The distribution of this taxon is reportedly wide-ranging in North America with large areas of absence. It has been reported to occur in Alaska, several Canadian provinces, and most of the western and northeastern USA, while absent from the Midwest and Appalachian states. In the southeastern USA, the species has been attributed to Alabama, Georgia, Louisiana, South Carolina, and Texas (Moran 2009; USDA, NRCS 2012).

The record of *Crassula aquatica* in Alabama appears to be based solely on a collection by Charles Mohr from Mobile County on 10 April 1887 (*Mohr s.n.*, US 782213). Although Mohr included this species (as *Tillaea aquatica* L.) in *Plant Life of Alabama* (1901), recent accounts of the Alabama flora (Kral et al 2011; Kral et al 2012) have omitted it. Moran (2009), however, attributed *C. aquatica* to Alabama while USDA, NRCS (2012) specifically cites an occurrence in Mobile County. Both of these references can likely be traced back to the Mohr specimen and Mohr's subsequent floristic account (1901).

A collection in 2012 by the author in southwestern Alabama, 125 years after Mohr's original observation, confirms the existence of the species in the state.

Alabama. Marengo Co.: 4.0 air km WSW of Demopolis ca. 0.10 km E of jct with Gandy Ferry Road and Lock and Dam Road, 32.511093, -87.878064, 1 May 2012, *J. Kevin England 3428* (UWAL, duplicates to be distributed to NCU, TROY, UNA, and VDB). This collection was made from a seasonally flooded area (mudflat) of a backwater lake of the Tombigbee River. Associated species included *Taxodium distichum, Myosurus minimus, Eleocharis obtusa, Lysimachia minima, Ranunculus pusillus*, and *Veronica peregrina* var. *peregrina*.

In a treatment of New World *Crassula* species, Bywater & Wickens (1984) recognized *Crassula saginoides* (Maxim.) Bywater & Wickens as a taxon closely similar to *C. aquatica*. The distinction between the two was based primarily on fruiting pedicel length and habitat (pedicels 2–19 mm long for *C. saginoides* compared to less than 1 mm for *C. aquatica*). In comparison of habitat, they attributed *C. saginoides* to freshwater situations and *C. aquatica* to saline coastal habitats.

Moran (1994), in contrast, treated *Crassula saginoides* as an inland expression of *C. aquatica* that produces pedicels elongating in fruit. In his treatment of *Crassula* for *Flora of North America*, Moran (2009) noted that the typical form of *C. aquatica* has short fruiting pedicels and usually grows

in coastal salt marshes; he again regarded *C. saginoides* as merely a phenotypic "phase" of *C. aquatica*, thus not warranting recognition as a distinct taxon.

The Mohr specimen collected from coastal environments of Mobile County exhibits the short pedicel phase of *Crassula aquatica*. My specimen, collected in fresh water 253 kilometers from the coast, demonstrates the much longer fruiting pedicels identifiable with Moran's concept of the inland phase of *C. aquatica*.

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